IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of the claims in the application:

1. (Original) A method of transmitting data packets from a source device in a wireless network, comprising:

receiving a channel time allocation assignment at the source device, the channel time allocation assignment indicating: an assigned channel time allocation, a source address indicating that the source device is assigned to transmit during the assigned channel time allocation, and a destination address indicating that a destination device is assigned to listen during the assigned channel time allocation;

performing a first determining step to determine whether the source device has primary data to send to the destination device;

sending primary data from the source device to the destination device during the assigned channel time allocation if the first determining step determines that the source device does have primary data to send;

performing a second determining step to determine whether any time remains in the assigned channel time allocation after the step of sending primary data;

performing a third determining step to determine whether the source device has secondary data to send to a secondary device not assigned as the destination device if the second determining step determines that time remains in the assigned channel time allocation;

performing a fourth determining step to determine whether the secondary device is listening during the assigned channel time allocation if the third determining step determines that the source device has secondary data to send to the secondary device; and sending secondary data from the source device to the secondary device during the assigned channel time allocation if the fourth determining step determines that the source device does have secondary data to send.

2. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 1, further comprising:

performing a fifth determining step to determine whether any time remains in the assigned channel time allocation after the step of sending secondary data; and

repeating the second, third, and fourth determining steps as well as the step of sending secondary data if the fifth determining step determines that time remains in the assigned channel time allocation.

3. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 1,

wherein the source device maintains a device listening mode list of all network devices, the device listening mode list indicating a listening mode that each network device is currently operating in, and

wherein the third determining step is performed by having the source device look up the secondary device in the device listening mode list.

4. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 3, wherein the listening modes include a listen-to-all mode indicating

a policy of listening to all possible channel time allocations regardless of their assigned destination address.

5. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 3, wherein the listening modes include a listen-to-multicast mode indicating a policy of listening to all possible channel time allocations that are assigned to a multicast address as the destination address.

6. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 3, wherein the listening modes include a listen-to-source mode indicating a policy of listening to all possible channel time allocations that are assigned to a set unicast address as the destination address.

7. (Original) A method of transmitting data packets from a source device in a wireless network, comprising:

receiving a channel time allocation assignment at the source device, the channel time allocation assignment indicating: an assigned channel time allocation, a source address indicating that the source device is assigned to transmit during the assigned channel time allocation, and a destination address indicating that a destination device is assigned to listen during the assigned channel time allocation;

performing a first determining step to determine whether the source device has secondary data to send to a secondary device not assigned as the destination device;

performing a second determining step to determine whether the secondary device is listening during the assigned channel time allocation if the first determining step determines that the first device has secondary data to send to the secondary device; and

sending secondary data from the source device to the secondary device during the assigned channel time allocation if the second determining step determines that the source device does have secondary data to send.

8. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 7, further comprising:

performing a third determining step to determine whether any time remains in the assigned channel time allocation after the step of sending secondary data; and

repeating the first, second, and third determining steps as well as the step of sending secondary data if the third determining step determines that time remains in the assigned channel time allocation.

9. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 7,

wherein the source device maintains a device listening mode list of all network devices, the device listening mode indicating a listening mode that each device is currently operating in, and

wherein the second determining step is performed by having the source device look up the secondary device in the device listening mode list.

10. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 9, wherein the listening modes include a listen-to-all mode indicating a policy of listening to all possible channel time allocations regardless of their assigned destination address.

11. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 9, wherein the listening modes include a listen-to-multicast mode indicating a policy of listening to all possible channel time allocations that are assigned to a multicast address as the destination address.

12. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 9, wherein the listening modes include a listen-to-source mode indicating a policy of listening to all possible channel time allocations that are assigned to a set unicast address as the destination address.

13. (Original) A method of transmitting data packets from a source device in a wireless network, comprising:

receiving a channel time allocation assignment at the source device, the channel time allocation assignment indicating: an assigned channel time allocation, a source address indicating that the source device is assigned to transmit during the assigned channel time allocation, and a destination address indicating that a destination device is assigned to listen during the assigned channel time allocation;

performing a first determining step to determine whether the source device has primary data to send to the destination device;

sending primary data from the source device to the destination device during the assigned channel time allocation if the first determining step determines that the source device does have primary data to send;

performing a second determining step to determine whether any time remains in the assigned channel time allocation after the step of sending primary data;

performing a third determining step to determine which non-destination devices are listening during the assigned channel time allocation if the second determining step determines that time remains in the assigned channel time allocation;

performing a fourth determining step to determine whether the source device has secondary data to send to a secondary device if the third determining step determines that at least one of the non-destination devices will be listening during the assigned channel time allocation, the secondary device being one of the non-destination devices that will be listening during the assigned channel time allocation; and

sending secondary data from the source device to the secondary device during the assigned channel time allocation if the fourth determining step determines that the source device does have secondary data to send.

14. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 13, further comprising:

performing a fifth determining step to determine whether any time remains in the assigned channel time allocation after the step of sending secondary data; and repeating the second, third, and fourth determining steps as well as the step of sending secondary data if the fifth determining step determines that time remains in the assigned channel time allocation.

15. (Currently Amended) A method of transmitting data packets from a source device in a wireless network, as recited in claim ~~3~~ 13,

wherein the source device maintains a device listening mode list of all network devices, the device listening mode indicating a listening mode that each device is currently operating in, and

wherein the third determining step is performed by having the source device look up the secondary device in the device listening mode list.

16. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 15, wherein the listening modes include a listen-to-all mode indicating a policy of listening to all possible channel time allocations regardless of their assigned destination address.

17. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 15, wherein the listening modes include a listen-to-multicast mode indicating a policy of listening to all possible channel time allocations that are assigned to a multicast address as the destination address.

18. (Original) A method of transmitting data packets from a source device in a wireless network, as recited in claim 15, wherein the listening modes include a listen-to-source mode indicating a policy of listening to all possible channel time allocations that are assigned to a set unicast address as the destination address.